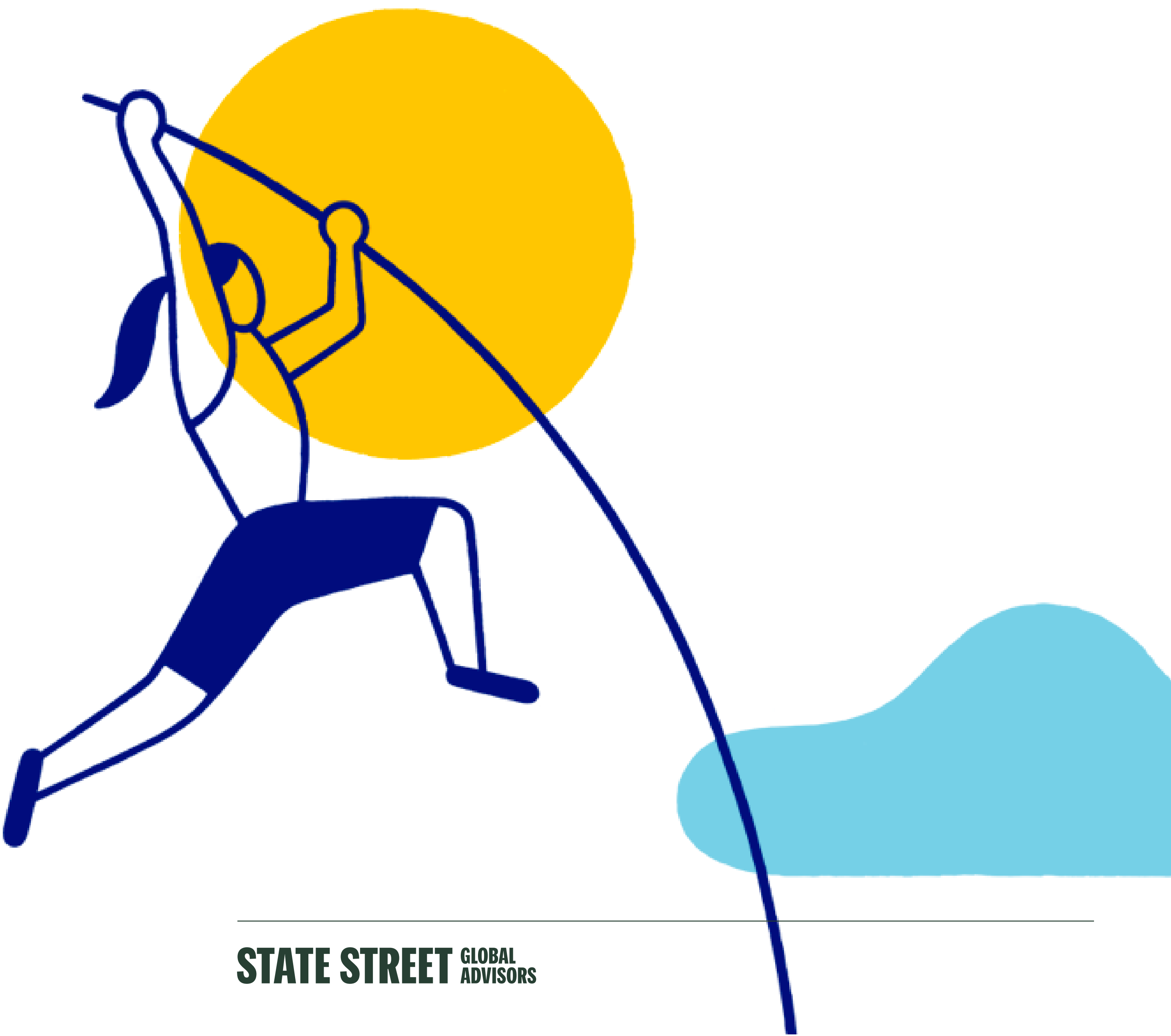
Research Report

Environmental, Social & Governance (ESG)

November 2019

Into the Mainstream

ESG at the Tipping Point



STATE STREET GLOBAL ADVISORS

About this Study

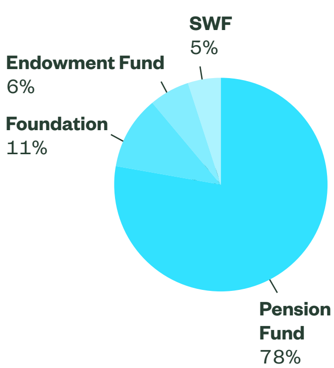
To gain deeper insights into how investors are implementing ESG strategies into their portfolios and the challenges they face, in mid-2019 State Street Global Advisors surveyed senior executives with asset allocation responsibilities at over 300 institutions. They included private and public pension funds, endowments, foundations and official institutions. Respondents are directly involved in or influence asset allocation decisions.

Methodology and Results

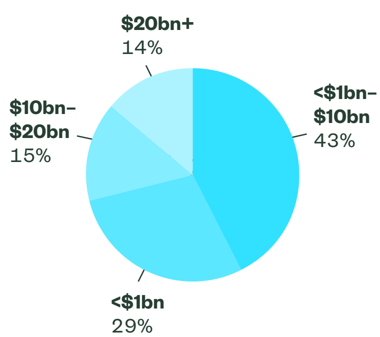
The survey was conducted by a combination of online and telephone interviews. The results were analyzed and collated and comprehensively supplemented by a series of in-depth interviews with senior institutional investment professionals.

Respondents were asked to rank their top three most significant factors. The percentages shown are based on the total number of respondents selecting a given factor within their top three.

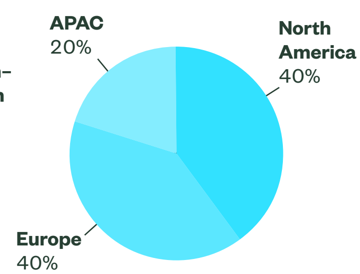
Institution Type



AUM



Region



State Street Global Advisors would like to especially thank the following people and institutions for the valuable insights they offered in additional qualitative interviews:

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Michael Cappucci, SVP, Compliance and Sustainable Investing, **Harvard Management Company**
Owen Thorne, Portfolio Manager — Monitoring and Responsible Investment, **Merseyside Pension Fund**
Nils Ladefoged, Chief Portfolio Manager, **PKA**
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Introduction

In 2017, we conducted a major global survey to give deeper insight into the increasingly important Environmental, Social and Governance (ESG) market. *Performing for the Future* revealed a picture of ESG investment driven by performance beliefs, coupled with challenges and evolving pathways to adoption.

Fast-forward two years and ESG investing had grown by more than a third to $30+ trillion, over a quarter of the world's professionally managed assets.

ESG may well be becoming a mainstream trend, but every institutional investor — from pension funds to endowments to sovereign wealth funds — faces a unique mix of forces pushing them towards, or pulling them away from, ESG investing.

As institutions try to respond to these competing forces — without compromising their risk–return requirements — they must chart their own course. This means finding a best-fit approach to incorporating ESG factors into their investment process and balancing cost pressures with the need to build up specialist knowledge.

Our latest research uncovers the views of more than 300 institutional investors and world-leading institutions, revealing what is driving organizations to adopt ESG, how this is influencing adoption, and the barriers that must be overcome to deliver the best outcomes.

Key Findings

1

Fiduciary duty, regulation and mitigating ESG risk are the key push factors driving investors towards ESG

Fiduciary Duty is Clear Once an uncertainty for many investors, the fiduciary duty aspect of ESG is fast becoming more certain, with 46% of respondents seeing it as the key driver of adoption.

Regulatory Landscape Driving Adoption Also at 46%, the other leading driver for many is regulation. Though perhaps more so currently in EMEA and APAC, it is clear that regulation will increasingly shape future adoption, particularly on topics such as climate.

Investment Risk Must be Addressed At 44%, mitigation of ESG risk comes in very close behind, with many investors now realizing the danger that ignoring ESG entails.

2

Data quality, internal resource constraints and the need for expertise are the key factors pulling investors away from ESG

Data in Disarray For nearly half of respondents, the current state of ESG data — single sourced, low correlation and confusing terminology — is a hindering factor to accurately assessing the credentials of underlying companies and their portfolio-level impact.

Resource Constrained Internal resource constraints loom large when it comes to ESG adoption and implementation across asset classes. Every investor surveyed has plans to employ more ESG resources.

Expertise Needed Allied to resource constraint, for nearly 40% of respondents a lack of expertise in integrating ESG was a key hindrance factor.

3

Effective risk measurement is critical for all, regardless of investment path taken

Investment Approach Adopted Depends on Key Motivation or Push Factor The relevant ESG push factor influences the investment approach taken. For example, those motivated by mitigating ESG risks are more likely to implement systematic integration or positive screening, while those driven by regulatory change and beneficiary pressure are more likely to apply exclusionary screening.

Risk Measurement Capability Critical for Manager Choice For 97% of institutions the ability to measure ESG risk is critical in assessing the ESG capabilities of managers.

Ability to measure success varies between ESG Factors Most investors report finding it far easier to measure Governance than Environmental or Social impact. Data improvements and reporting refinements are sorely needed.

What's Driving Investors Towards ESG? **The Push Factors**

There's Growing Recognition that Mitigating ESG Risk is Part of Fiduciary Duty

The view that ESG is simply part of fiduciary duty is becoming commonplace, with 46% citing this as a top push factor. Why is this? Our analysis of respondents driven by fiduciary duty suggests that mitigating ESG investment risks and shaping a sustainable economy are viewed as key responsibilities to their beneficiaries — two different drivers but with the same effect. One tangible example here is climate risk; cited clearly in qualitative feedback as a key risk that investors must address.

Regulatory Pressure is a Key Driver of ESG Adoption

Nearly half (46%) of institutions say regulation is a top push factor driving their ESG adoption. Domestic or local regulation is a major factor shaping respondents' approach, though institutions with more mature ESG policies in place are more heavily influenced by global initiatives such as the UN's PRI or the SASB framework.

Risk Mitigation is Important

Mitigating ESG risk in the portfolio is a significant push factor for respondents. The expectation that ESG will drive outperformance is not and less than one in ten investors cite higher returns as a driving factor. There are measurement challenges and it's still early in the investment cycle for many ESG strategies, so more focus may need to be directed on quantifying investment impact over the next few years.

Top Push Factors for ESG Engagement

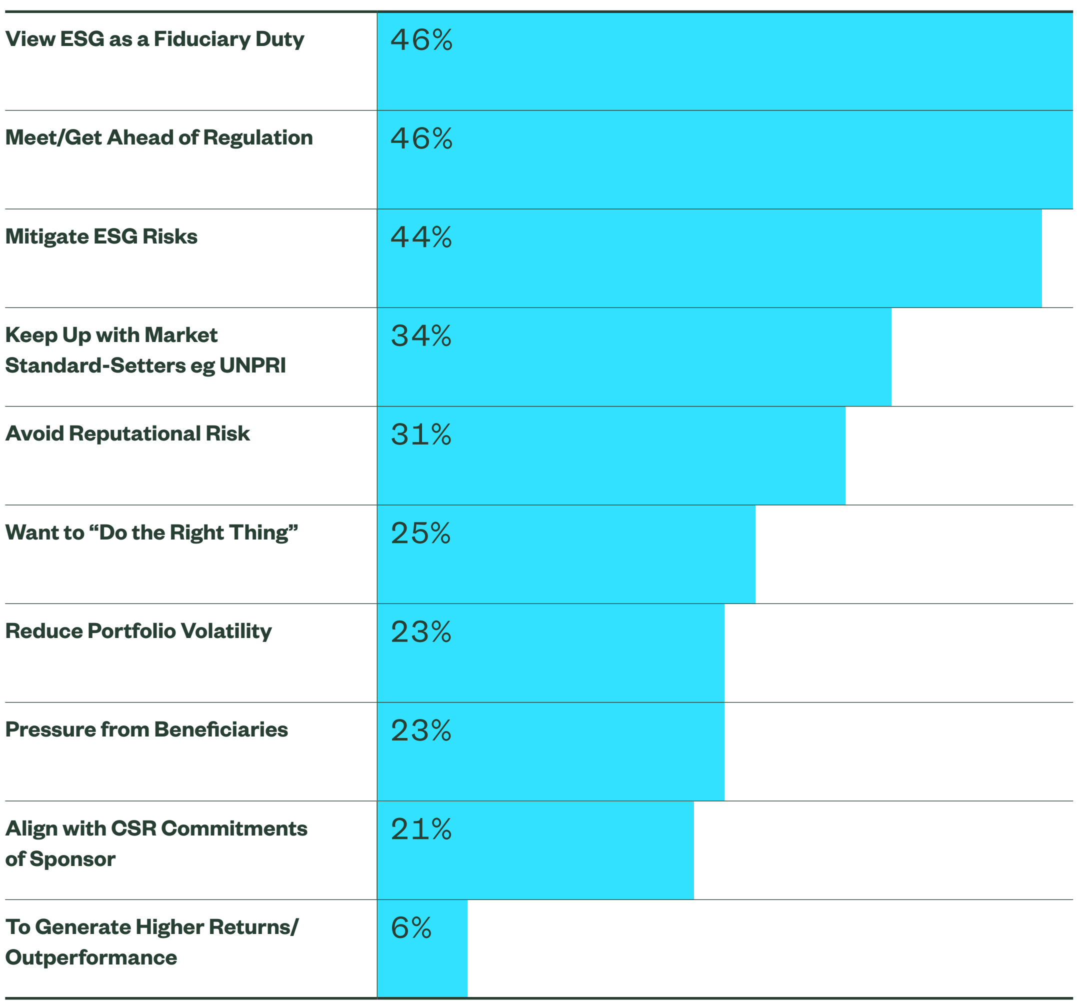
The clear top push factors driving ESG adoption are responding to regulation, meeting fiduciary duty and mitigating ESG risks in the portfolio.

The global regulatory environment is changing fast, with increasing numbers of countries enshrining ESG requirements into their regulations. This will only continue.

The fiduciary landscape is also becoming clearer, effectively removing a previous barrier to ESG uptake. Our belief is that this is linked strongly to the importance of mitigating ESG risks as a key push factor, alongside a reduction in the notion that investors must sacrifice returns when implementing ESG investments. In fact, almost a quarter (23%) state that reducing volatility is a key driver of adoption.

Investors aren’t primarily motivated by a view that ESG will drive outperformance, perhaps since evidence is limited at this stage given the challenges of attributing performance to ESG factors. And, some ESG pay-offs will be realized long term.

What are the most significant factors in driving your institution to adopt ESG principles?



Digging Deeper: The Remaining Key Drivers for Those Primarily Driven by Fiduciary Duty

For those in the sample that are primarily driven by fiduciary duty, ESG risk mitigation and a requirement to be ethically or socially responsible are the next closest drivers. A desire to reduce volatility through ESG investment is the next driver at 29%.

Investors are looking to mitigate against clear risk factors such as climate change and carbon. As a result, some theme-based approaches are becoming increasingly popular while some important ESG principles are being left behind because it's harder to quantify the investment risks. The question has to be asked: 'Is this ESG investing or simply best practice investment management for long-term investors?'

What are the next most significant factors in driving your institution to adopt ESG principles?

(For those choosing Fiduciary Duty as their key push factor)

> The thing that has changed, though, is the factors that must be taken into account as part of that fiduciary duty. That's the interesting part of the external forces and factors that now have come to light and are continually coming at us.
>
> The challenge is to take those factors into account, but still look at it through a lens of performance-based fiduciary duty.

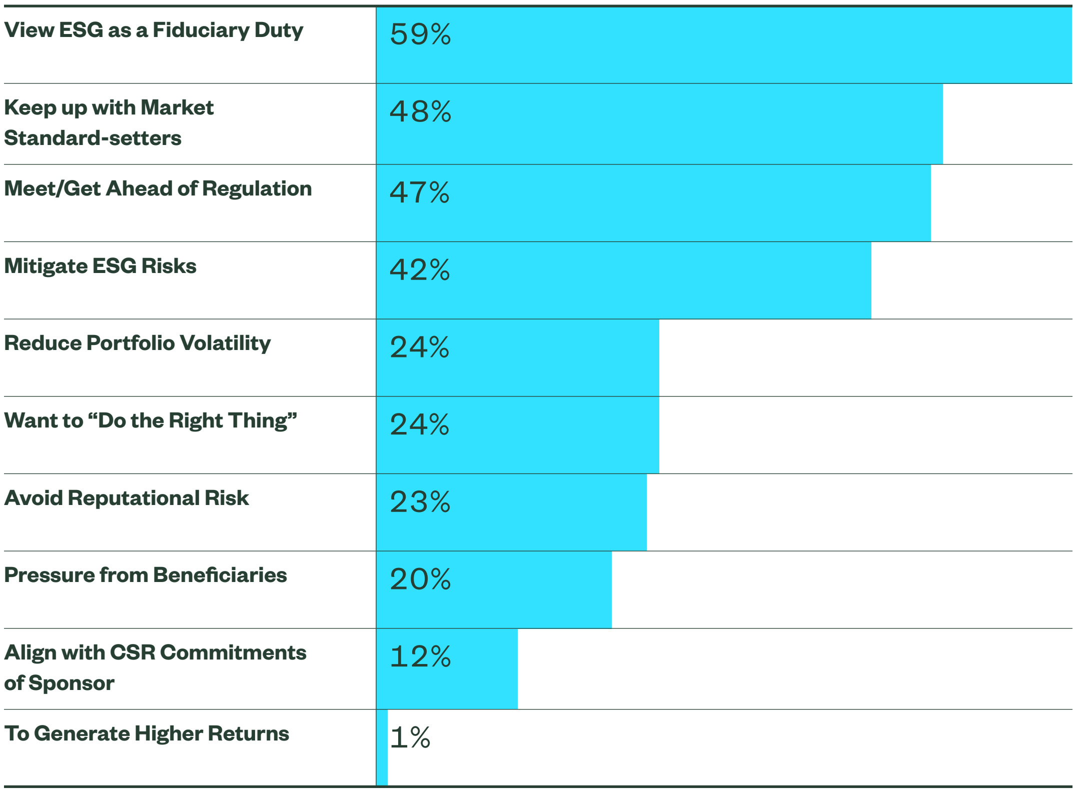
—Chris Philips, Washington State Investment Board

Each Region is Driven by Different Key Factors

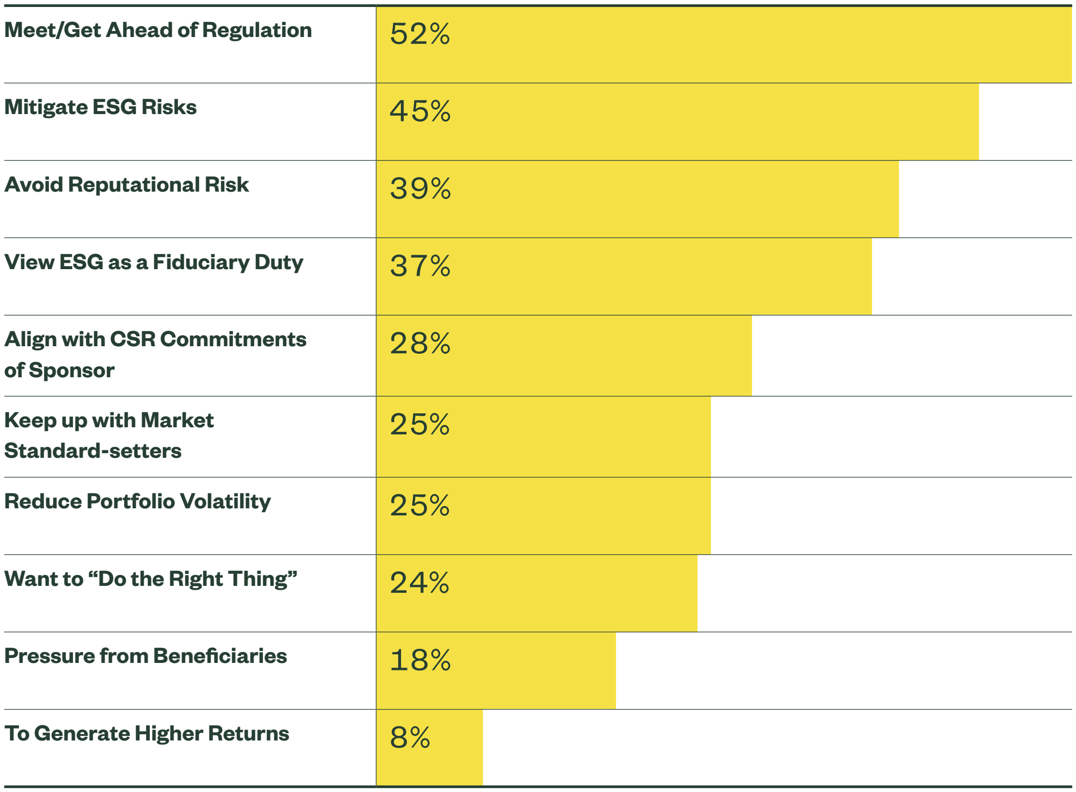
North American investors are most likely to view ESG as a fiduciary duty, while European investors are driven by regulation, performance and reputational risk.

The prime drivers for APAC investors are performance risk and pressure from beneficiaries.

Factors leading to ESG adoption in North America:



Factors leading to ESG adoption in Europe:

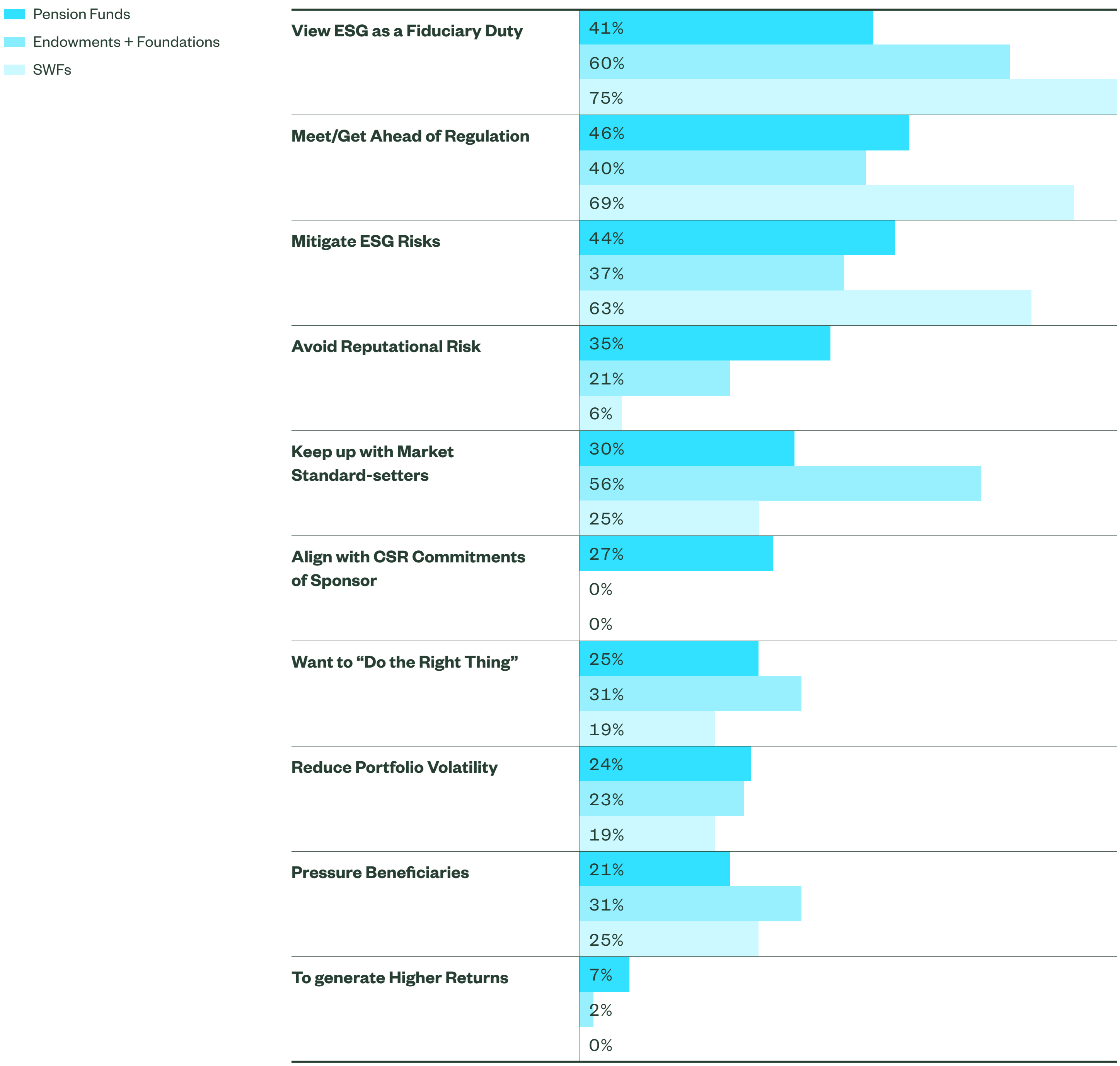


Factors leading to ESG adoption in APAC:

Fiduciary Duty and Regulatory Pressure are Clear Drivers for All Investor Types

Out of all the groups, pension funds are the one most concerned with reputational risk, though regulatory drivers are their top concern. Endowments and foundations feel the most under pressure from beneficiaries, but their main driver is fiduciary. For sovereign wealth funds fiduciary duty and regulatory impetus are clear push factors.

What are the most significant factors in driving your institution to adopt ESG principles? (By investor type)

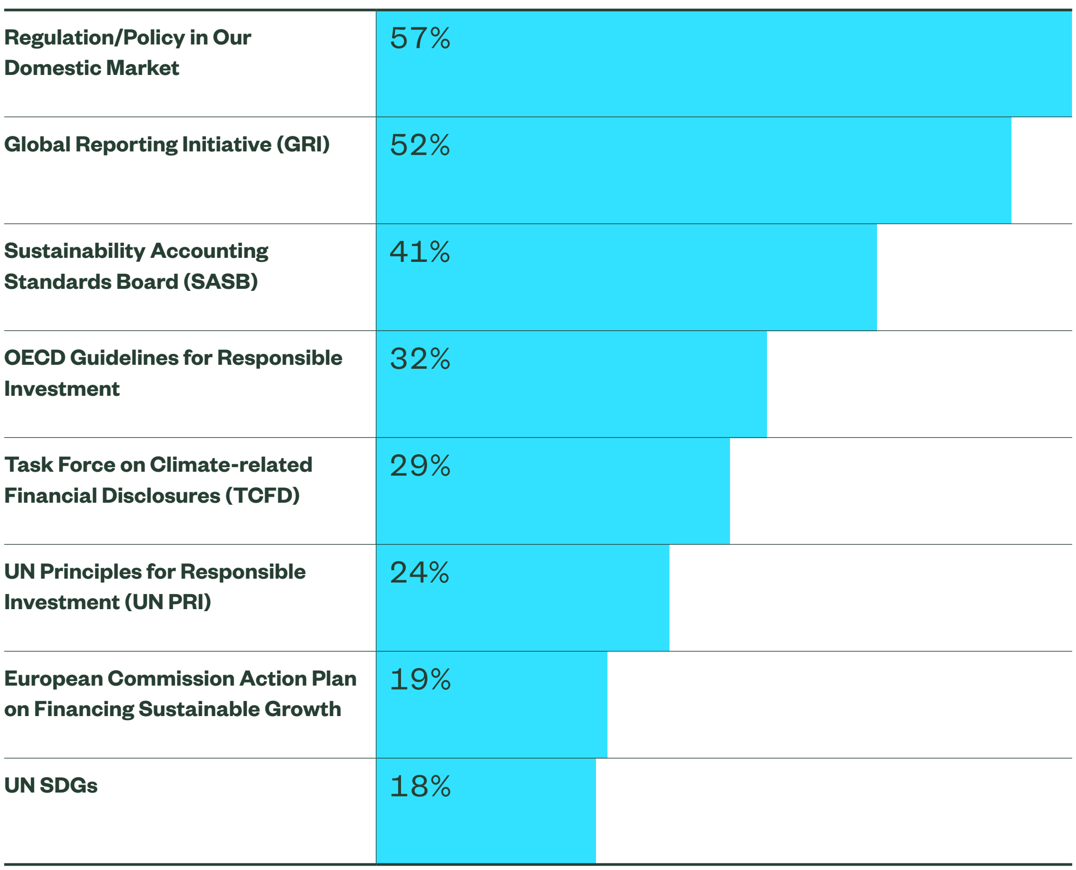


Frameworks and Initiatives Shape ESG Approach

Regulation and domestic policy, followed closely by the requirements of the Global Reporting Initiative (GRI) and the increasingly influential SASB framework, are the greatest drivers in shaping investors' ESG approaches. However, the results are nuanced depending on the degree to which investors have a formal ESG policy in place.

While GRI requirements maintain a second place throughout, those investors who have considered a formal policy are driven strongly by the UN PRI. For those with a less advanced policy positioning, domestic regulation attains a higher degree of importance. It seems that the degree of ESG knowledge and sophistication has an impact on what the main ESG adoption driver will be.

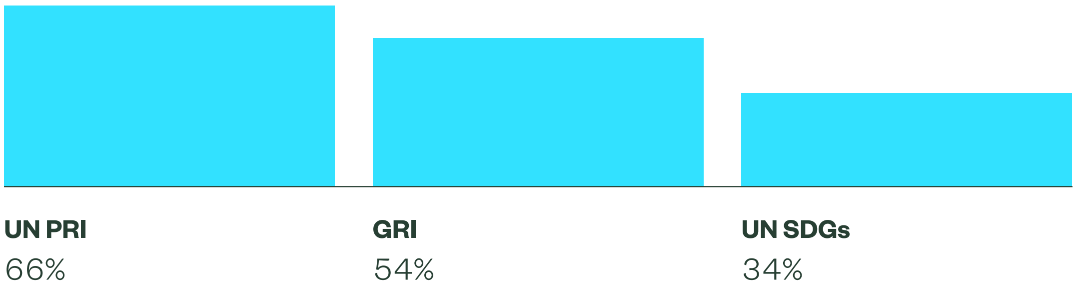
Which frameworks/initiatives have had the biggest impact on shaping your approach to ESG/responsible investing?



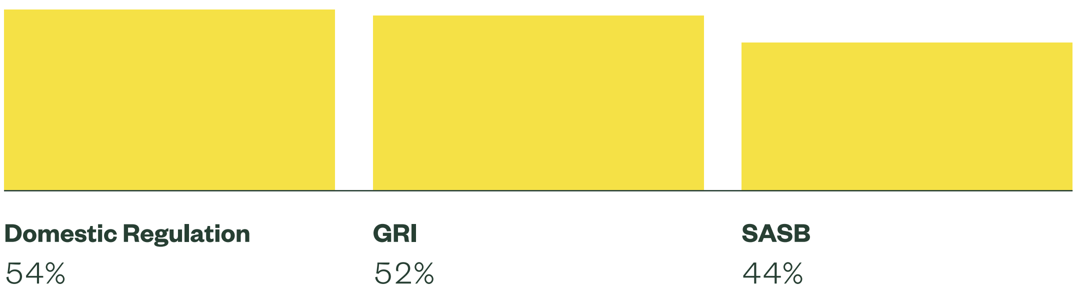
Having a formal policy in place influences which frameworks are considered to have the most impact

(Most impactful framework by formal ESG policy status)

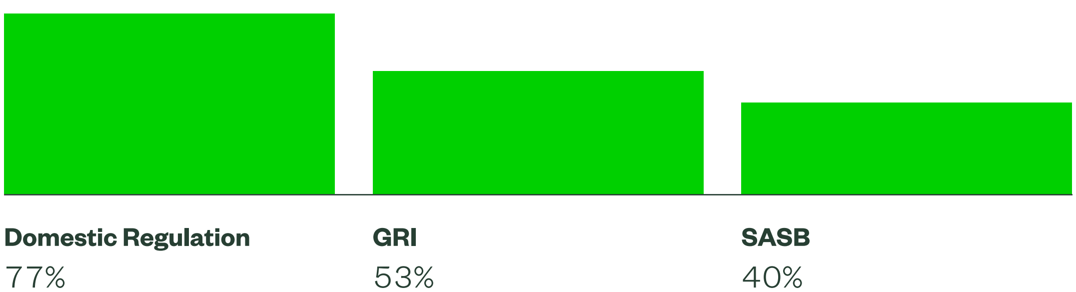
Investors with formal ESG policy in place



Investors currently implementing formal ESG policy



No formal policy yet, but investing in ESG



What's Keeping Investors Away from ESG? **The Pull Factors**

ESG Data Remains a Concern — Particularly its Consistency and Coverage

Nearly half (44%) of respondents say the state of ESG data is a top pull factor hindering their ESG adoption. Delving deeper, the most problematic aspects are the consistency of data across providers, and the lack of availability of ESG data in some areas of the market.

Resource Constraints and Cost Implications are Key Barriers

As institutions look to integrate ESG analysis into the investment process and simultaneously manage a host of new reporting requirements, pressure on resources will only increase.

Lack of Expertise is Holding Investors Back

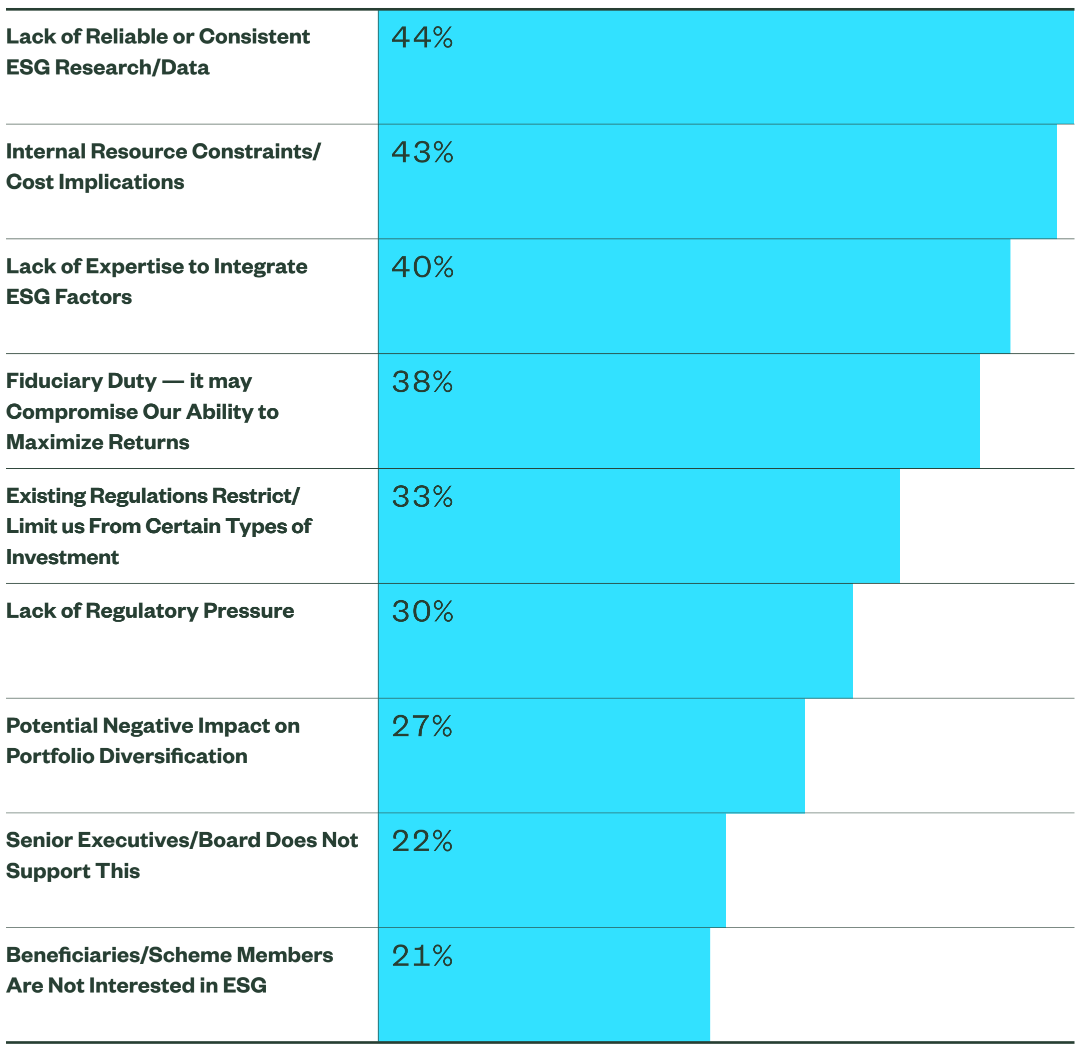
Implementing an effective ESG strategy can be complex. Many respondents felt they lacked the expertise to do so properly. Should institutions hire specialists? Make ESG everyone's job? Or rely on external expertise in the form of their asset managers or advisors?

Inadequate ESG Data and Resource Constraints Hinder Adoption

The availability of reliable and consistent ESG data is the top barrier to deeper ESG adoption, followed by resourcing or cost issues and a lack of available ESG talent to manage ESG adoption.

Cited by 46% as a push factor driving ESG engagement, fiduciary duty is, on the other hand, viewed as a barrier to adoption, but by less respondents (38%). What explains this dichotomy? It seems for some there's a lingering concern that ESG adoption may hinder the ability to maximize returns. Despite this, there does seem to be a clear trajectory towards ESG increasingly being considered a key part of fiduciary duty.

What is the biggest barrier to your institution increasing adoption of ESG?



ESG Data Disappoints

While most are satisfied with overall thematic coverage (eg Carbon, Greenhouse Gases), consistency and depth of specific coverage fall far short. Investors are struggling with inconsistent ESG scoring from different providers and are not satisfied with access to ESG data in many areas of the market.

	Percent Satisfied
ESG focus (areas of ESG covered)	93
Quality/accuracy (verified, trustworthy)	62
Coverage (companies, sectors, markets)	32
Consistency (of standards, analysis)	18

Understanding the Data Challenge

Lack of standardization and transparency in providers' data collection and scoring methodologies pose key challenges for investors.

ESG data providers generally develop their own sourcing, research, and scoring methodologies. As a result, the rating for a single company can vary widely across different providers. We recently conducted research[1] to quantify the degree to which this lack of standardization leads to variance among the ESG scores used by investors.

As part of an 18-month due-diligence process in which we looked at more than 30 data providers, we examined the cross-sectional correlations for four leading data providers' ESG scores, using the MSCI World Index as the coverage universe.

MSCI and Sustainalytics are two of the most widely used ESG data providers. But, as shown in the table below, our research determined a correlation of only 0.53 among their scores, meaning that their ratings of companies are only consistent for about half of the coverage universe. These differing methodologies have implications for investors. In choosing a particular provider, investors are, in effect, aligning themselves with that company's ESG investment philosophy in terms of data acquisition, materiality, aggregation and weighting.

	Sustainalytics	**MSCI**	**RobecoSAM**	**Bloomberg ESG**
Sustainalytics	1	0.53	0.76	0.66
MSCI		1	0.48	0.47
RobecoSAM			1	0.68
Bloomberg ESG				1

Source: State Street Global Advisors Research. As of 2018.

This choice is complicated by the lack of transparency in the methodologies. Most data providers treat their methodologies as proprietary information. By relying on an ESG data provider's score, asset owners are taking on the perspectives of that provider without a full understanding of how the provider arrived at those conclusions.

To address these challenges we built R-Factor™, our own ESG scoring system. R-Factor leverages multiple data sources and aligns them to widely accepted, transparent materiality frameworks, generating a unique ESG score for listed companies. It was built to solve the ESG data quality problem and to remove opaqueness around ESG materiality in the scoring process. R-Factor is the only score that is backed by a strong stewardship commitment from an asset manager and is designed to put companies in the driver's seat to help create sustainable markets.

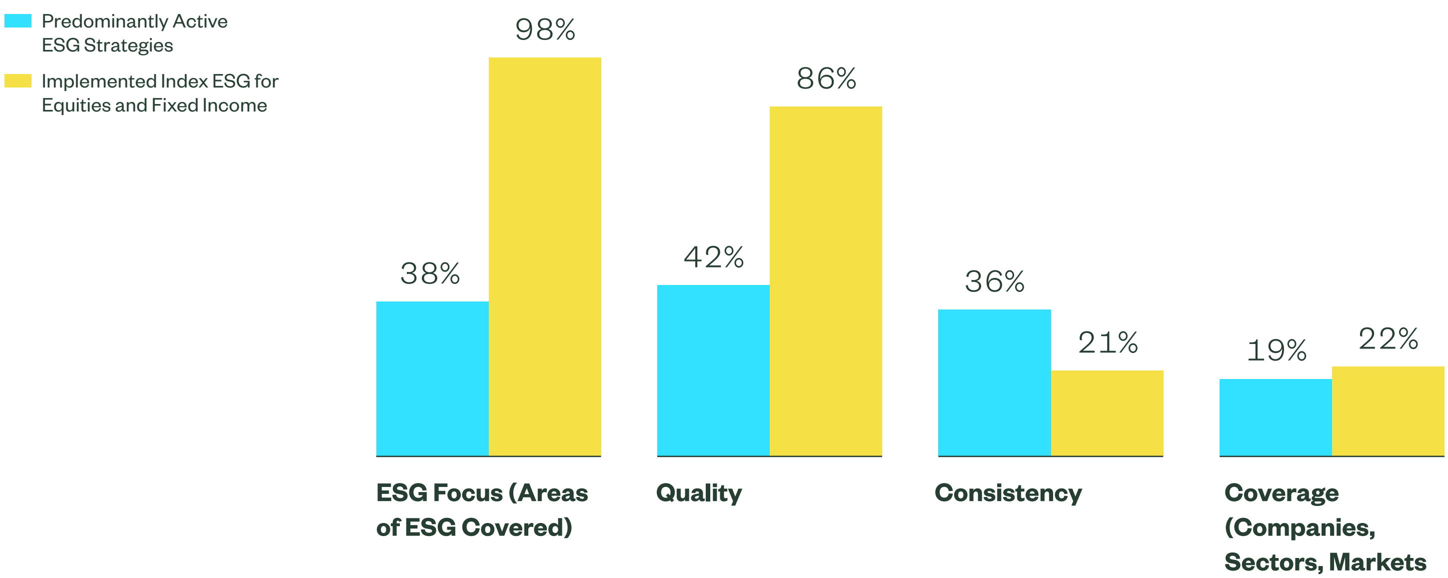
Index Investors are Less Satisfied with ESG Data Consistency

Institutions that have implemented ESG for index-based strategies (for equities and fixed income) are most concerned about the consistency of ESG data from different providers — inconsistent ESG scoring approaches between data providers creates challenges for such investors as they try to target and track certain outcomes from their ESG investments.

The quality of ESG data versus comparable non-ESG data and investment research is of greater concern for investors taking a predominantly active approach.

Well over half (63%) of index investors are most reliant on the main ratings agencies. This is in stark contrast to active investors, at 39%. In fact, 47% of active investors rely on in-house research (versus only 26% of index investors).

How satisfied are you with the following aspects of the ESG research/data that your institution currently has access to? (Percentage answering 'somewhat satisfied' or 'very satisfied')

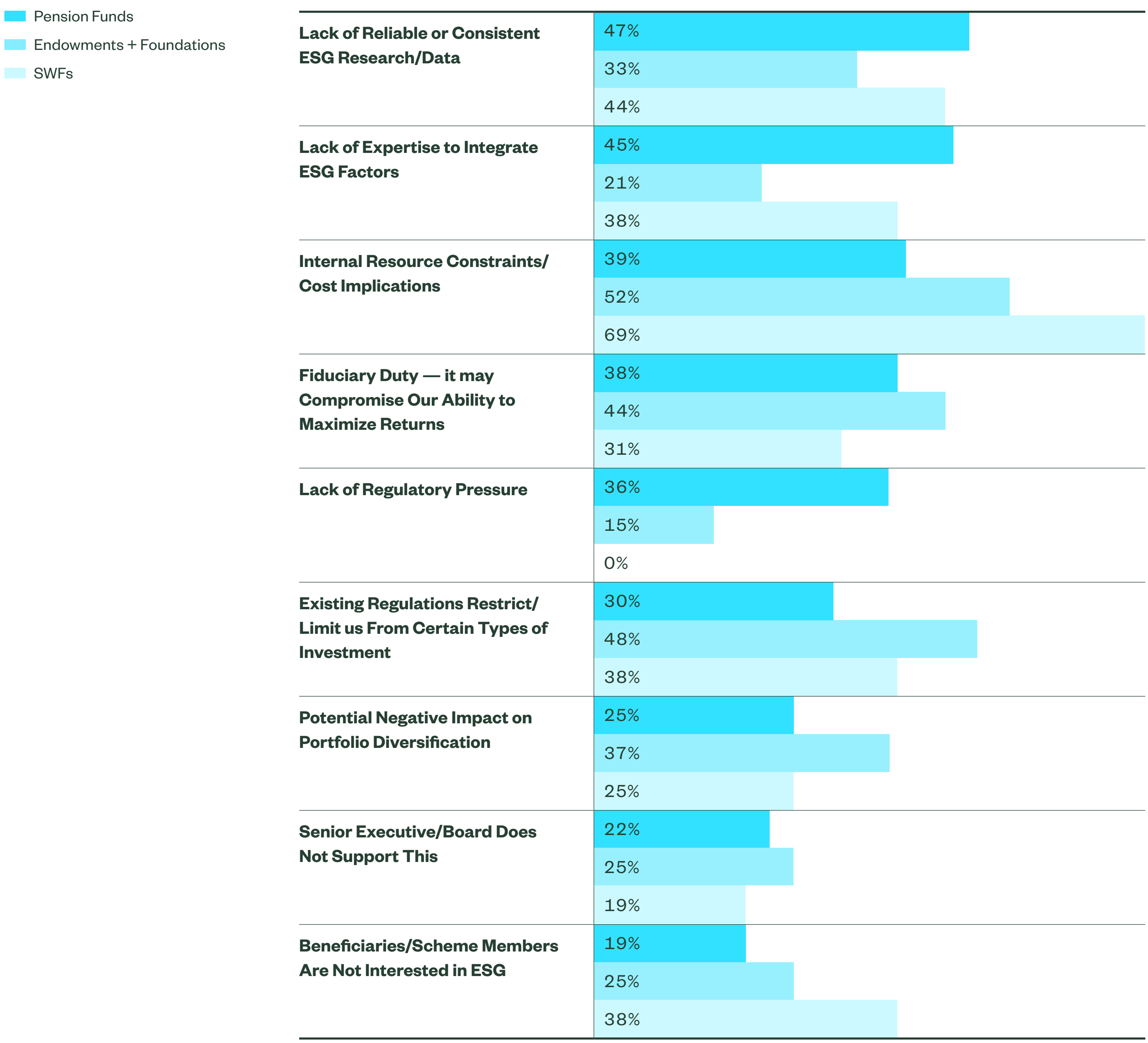


Key Barriers Vary for Each Investor Type but Resource and Data are High for All

Pension funds cite the availability of reliable ESG data as their top pull factor; endowments are the group most concerned with potential impact on returns and diversification.

A surprisingly large 69% of sovereign wealth funds view internal resource costs as a hindering factor. Clearly, there is scope here for SWFs to partner with asset managers and other experts to help achieve their ESG goals.

What is the biggest barrier to your institution increasing adoption of ESG? (By investor type)



Regional Variances When It Comes to Barriers to Adoption

Resource constraints worry North American investors the most, and they're the most concerned about ESG compromising their ability to maximize returns. For European investors the lead concerns are resource constraints and cost implications. APAC investors are feeling less impetus from beneficiaries and, again, resource constraints top their list.

Lead concerns for adoption of ESG in North America:

Internal Resource Constraints/Cost Implications	48%
Lack of Reliable or Consistent ESG Research/Data	47%
Fiduciary Duty — it may Compromise Our Ability to Maximize Returns	45%
Lack of Expertise to Integrate ESG Factors	39%
Existing Regulations Restrict/Limit us From Certain Types of Investment	36%
Lack of Regulatory Pressure	27%
Potential Negative Impact on Portfolio Diversification	25%
Senior Executive/Board Does Not Support This	16%
Beneficiaries/Scheme Members Are Not Interested in ESG	16%

Lead concerns for adoption of ESG in Europe:

Lack of Reliable or Consistent ESG Research/Data	48%
Lack of Expertise to Integrate ESG Factors	45%
Internal Resource Constraints/Cost Implications	37%
Lack of Regulatory Pressure	35%
Fiduciary Duty — it may Compromise Our Ability to Maximize Returns	33%
Existing Regulations Restrict/Limit us From Certain Types of Investment	29%
Senior Executive/Board Does Not Support This	29%
Potential Negative Impact on Portfolio Diversification	25%
Beneficiaries/Scheme Members Are Not Interested in ESG	20%

Lead concerns for adoption of ESG in APAC:

Internal Resource Constraints/Cost Implications	45%
Fiduciary Duty — it may Compromise Our Ability to Maximize Returns	37%
Existing Regulations Restrict/Limit us From Certain Types of Investment	37%
Potential Negative Impact on Portfolio Diversification	35%
Beneficiaries/Scheme Members Are Not Interested in ESG	35%
Lack of Expertise to Integrate ESG Factors	33%
Lack of Reliable or Consistent ESG Research/Data	30%
Lack of Regulatory Pressure	27%
Senior Executive/Board Does Not Support This	22%

From ESG Origins to Adoption

The factors which drive investors to ESG are a key determinant in how they approach ESG investing and their relative priorities.

Push Factors are Having Considerable Influence on ESG Adoption

Our results show that ESG push factors are playing an important part in determining how institutions incorporate ESG factors. Those driven to adopt ESG by regulatory change and beneficiary pressure are more likely to apply exclusionary screening, while those motivated by mitigating ESG risks are more likely to implement systematic integration.

Ability to Measure ESG Risk Tops Manager Selection Priorities

97% of institutions say the ability to measure ESG risk in the portfolio is important when assessing the ESG capabilities of external managers. Respondents' ESG origins influence them here too: those driven by regulation give more focus to managers' reporting abilities, while those prioritizing risk mitigation pay more attention to managers' stewardship practices.

ESG Adoption Within Real Assets Remains at Very Low Levels

Less than 1-in-20 respondents have integrated ESG within their private equity, real estate or infrastructure holdings. The largest institutions we surveyed (AUM of $50bn+) have undertaken more adoption within real assets. European institutions appear poised to move fastest to integrate ESG factors within real asset holdings over the next 12 months.

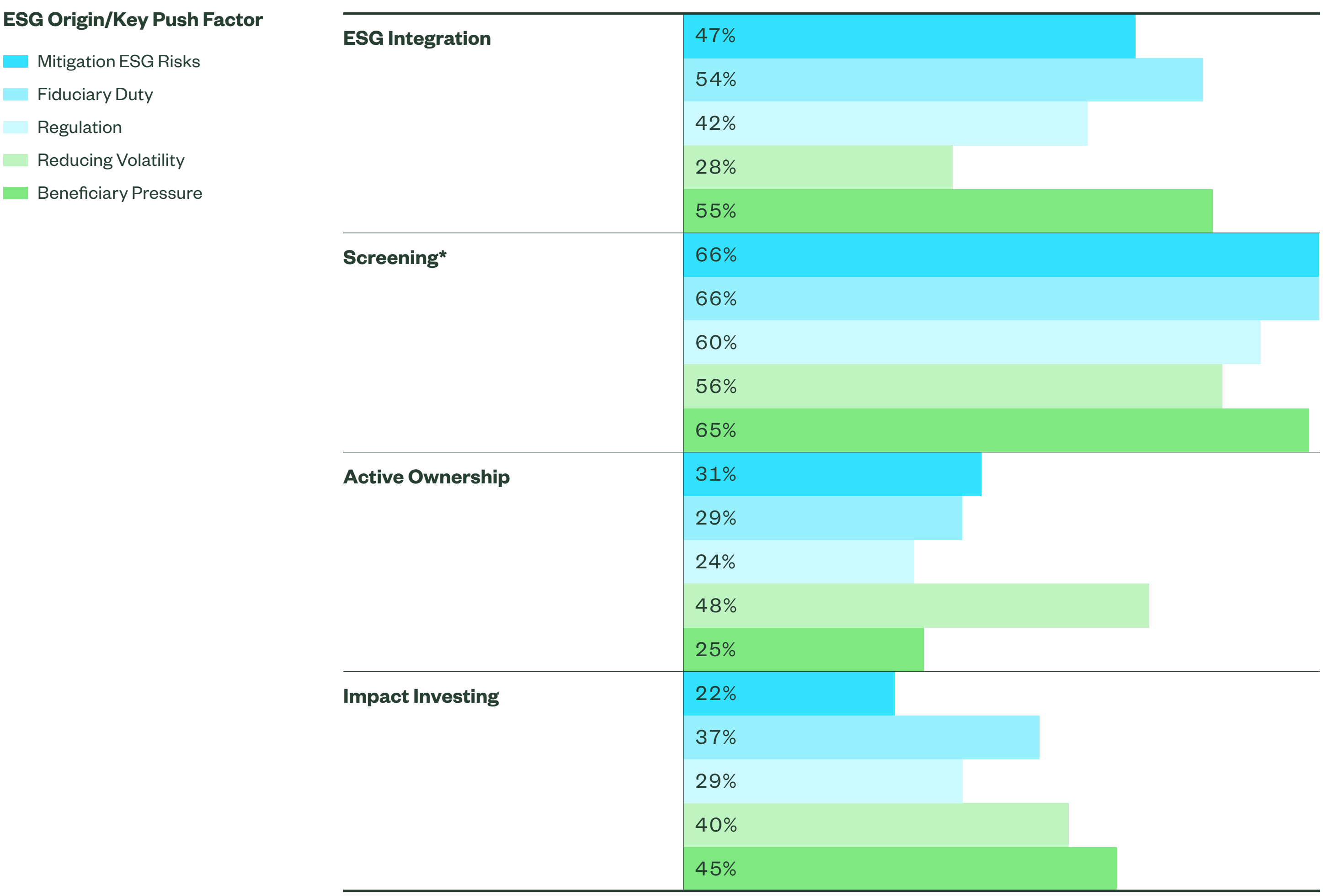
ESG Origins or Push Factors Influence Approach Taken

The factors which drive investors to ESG are a key determinant in how they approach ESG investing and their relative priorities. Those driven to adopt ESG by regulatory change and beneficiary pressure are more likely to apply exclusionary screening (42% and 50%, respectively).

Those institutions motivated by a desire to mitigate ESG risks are more likely to implement systematic integration and positive screening, but less likely to use exclusionary screening.

Which of the following approaches do you use to incorporate ESG issues into your *equity* investments?

(By ESG Origin/Key Push Factor)



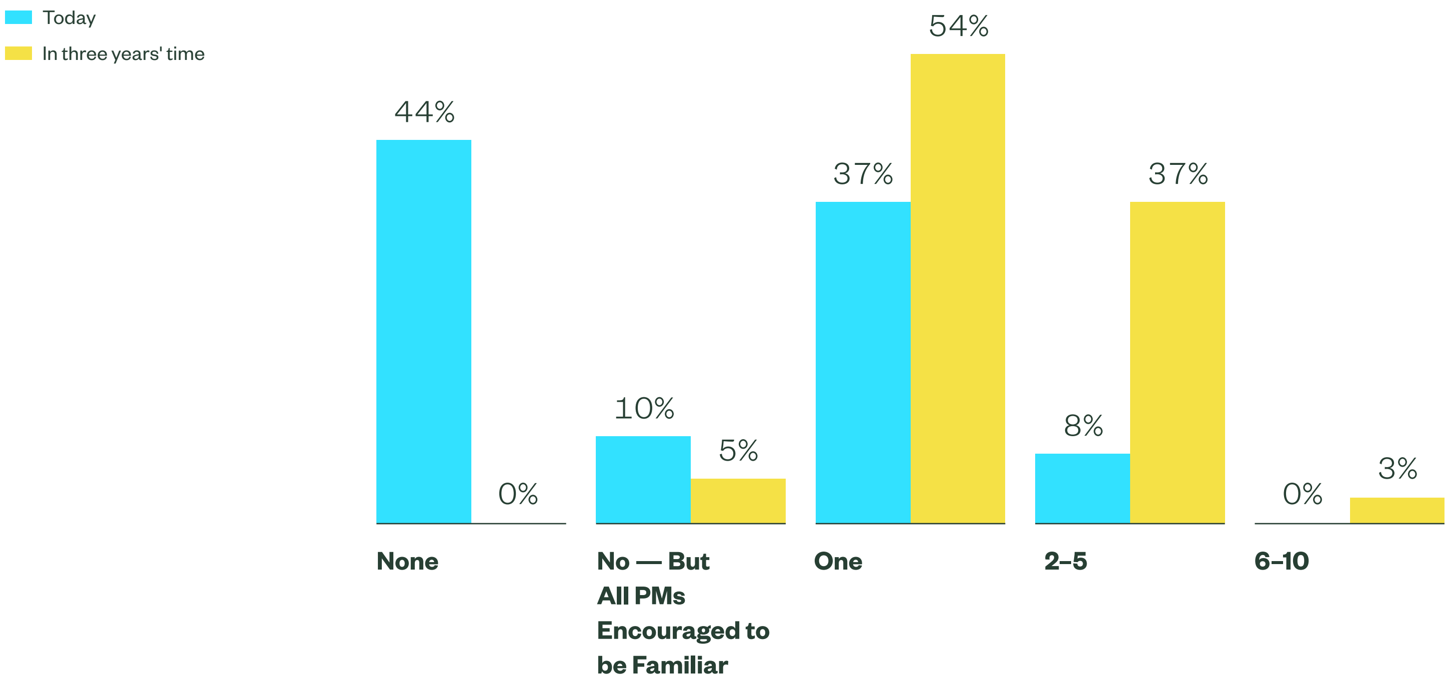
*Percentage applying ESG factors through screening, either exclusionary or positive.

Nearly Half of Institutions Have No In-House ESG Specialists Today — But All Institutions Plan to Hire for the Role Within 3 Years

Almost every respondent intends hiring ESG specialists rather than merely integrating ESG into all portfolio managers' roles. The likelihood is that ESG will become part of everyone's job in the future, but specialists will also have an increasingly important role to play.

—

Does your institution have any specialist staff in-house whose main job is to focus on ESG/responsible investing?

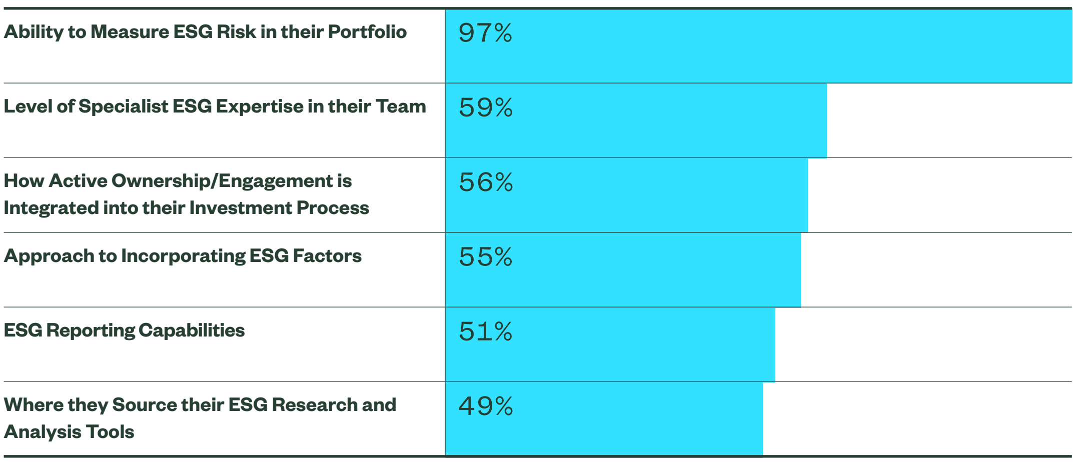


Ability to Measure ESG Risk is the Key Requirement in Manager Selection — But Priorities Vary Depending on Relevant ESG Push Factors

When it comes to choosing the right asset manager, the ability to measure risk is the number one requirement, regardless of the ESG push factor. There is nuance in the second-most important requirement, however. If driven by a desire to mitigate ESG risks, then active ownership is key for investors. But if the investor is driven by regulation, then relevant ESG expertise assumes more prominence.

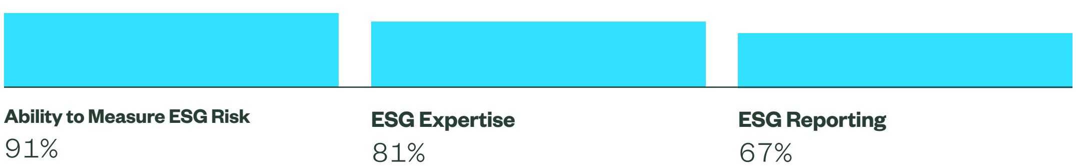
How important are the following qualities of external managers when assessing their ESG capabilities?

(Important/highly important)

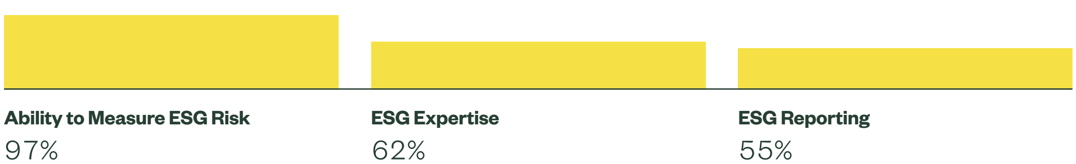


The Relevant Top Push Factors

Fiduciary Duty



Regulation



Mitigating ESG Risks

> If the bigger companies in the index are aware of and responsive to progressive, evidence-driven engagement and stewardship, it can potentially create the effect of reducing the volatility of their exposure to climate risk relative to their peers.
>
> —Owen Thorne, Merseyside Pension Fund

ESG Adoption Within Real Assets is Very Low — Except for Some of the Largest Institutions

Understandably, fixed income and equities are the asset classes with far and away the greatest degree of ESG adoption. What is perhaps more surprising is how low the adoption level is in private equity and real assets generally. One driver of this could arguably be the difficulty of obtaining the right data. There is an uptick in adoption for investors with greater AUM, but this is clearly an area with further to go.

Does your institution currently incorporate ESG factors into investments within the following asset classes?

Note: Data in the diagram shows percentage of respondents integrating ESG into any part of their portfolio for an asset class, **not** percentage of ESG coverage within an asset class.

	Infrastructure	Real Estate	Private Equity	Fixed Income	Equities
All Respondents	1%	2%	5%	92%	100%
AUM of $50bn+	19%	19%	35%	94%	100%

Among Those Yet to Apply ESG to Real Assets, European Investors are Most Inclined to do so Within the Next 12 Months

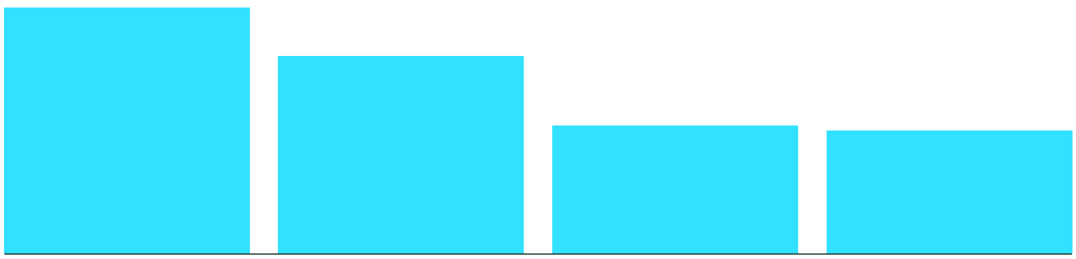
No adoption today — but will incorporate ESG factors within next 12 months:

	Europe	APAC	North America
Real Estate	37%	25%	18%
Private Equity	51%	59%	45%
Infrastructure	32%	23%	13%

Incorporating ESG: Screening Most Prevalent but Systematic Integration is Catching Up

At the overall level, integration of ESG factors into investment analysis and positive screening are the most common approaches to incorporating ESG within equity portfolios, while impact investing and exclusionary screening are less prevalent.

Which of the following approaches does your institution use to incorporate ESG issues into its *equity* investments?



Screening*	ESG Integration	Active Ownership	Impact Investing
60%	48%	31%	30%

*Percentage applying ESG factors through screening, either exclusionary or positive.

Investors with a More Formalized Approach to ESG are More Likely to be Using Systematic Integration

A key factor in determining the ESG approach taken appears to be the extent to which the investor/institution has developed a formal ESG policy. With a formal policy in place, integration is the most favored (66%) followed by positive screening (49%). For those in the process of implementing a formal policy, those categories hold true but with slightly less focus on integration (53%).

However, for those without a formal policy, and perhaps consequently less informed about ESG, the preferred approach is more widespread, with impact investing being the most favored overall (35%).

	Integration	Screening*	Active Ownership	Impact Investing
Formal ESG Policy in Place	66%	60%	43%	43%
Implementing Formal ESG Policy	53%	63%	32%	26%
No Formal Policy Yet, but Investing in ESG	26%	51%	25%	35%

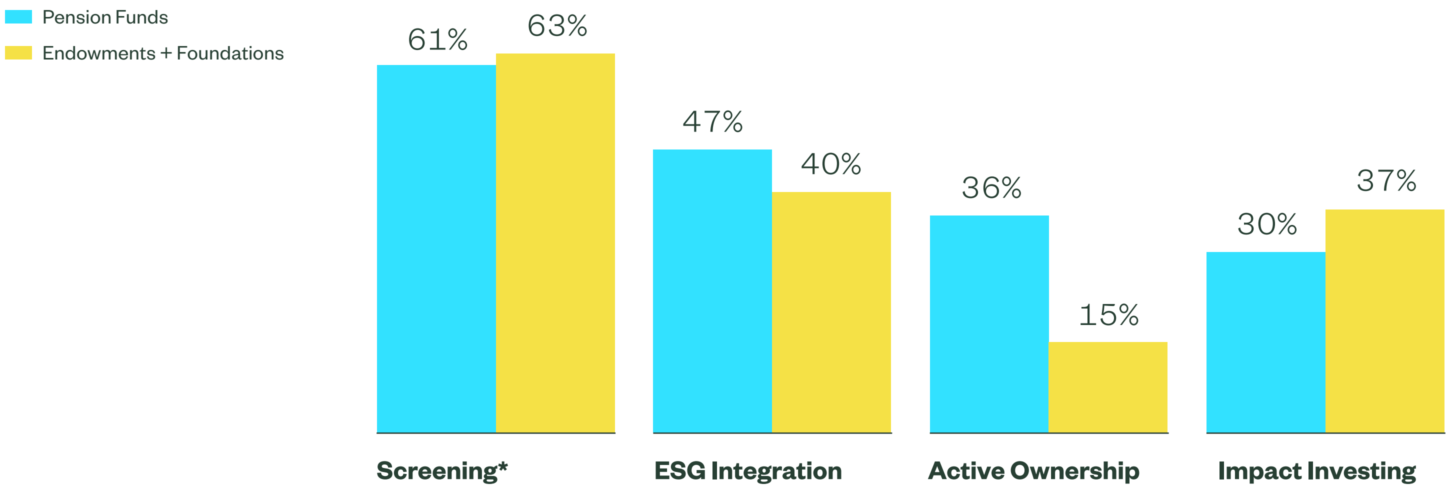
*Percentage applying ESG factors through screening, either exclusionary or positive.

ESG Adoption
Institution Types

ESG integration was the favored approach (47%) for pension funds, with positive screening following closely behind (45%). For endowments, integration shared favored position with positive screening (both 40%).

For both institution types, exclusionary screening maintained a respectable level of support although elsewhere our research showed support for such screening falling as institutions adopted more formalized ESG policies.

Which of the following approaches does your institution use to incorporate ESG issues into its *equity* investments?



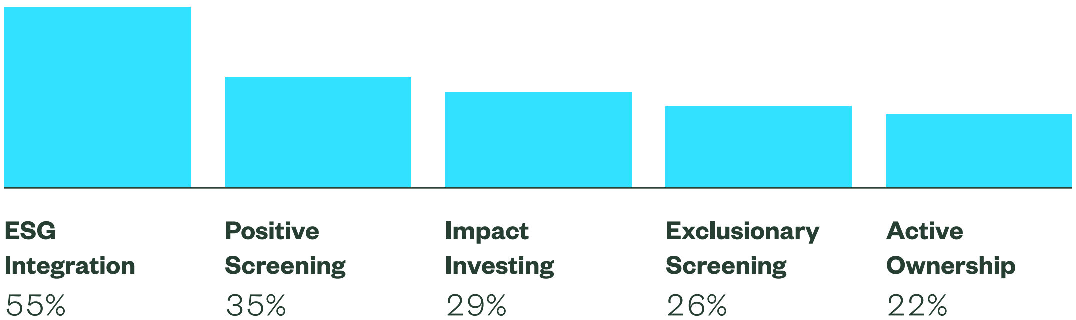
*Percentage applying ESG factors through screening, either exclusionary or positive.

ESG Adoption
Regions

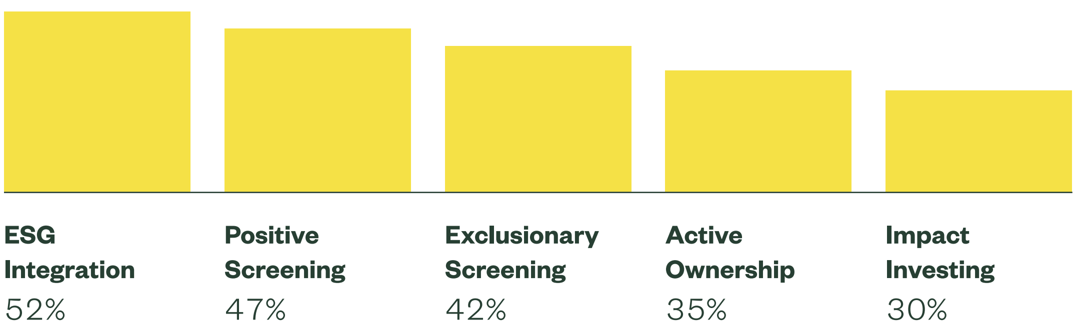
ESG integration was clearly favored by both North America and APAC (55% and 52%, respectively). Europe plowed a different course in favoring positive screening (48%) with integration and active ownership holding joint-second place.

Which of the following approaches does your institution use to incorporate ESG issues into its *equity* investments?

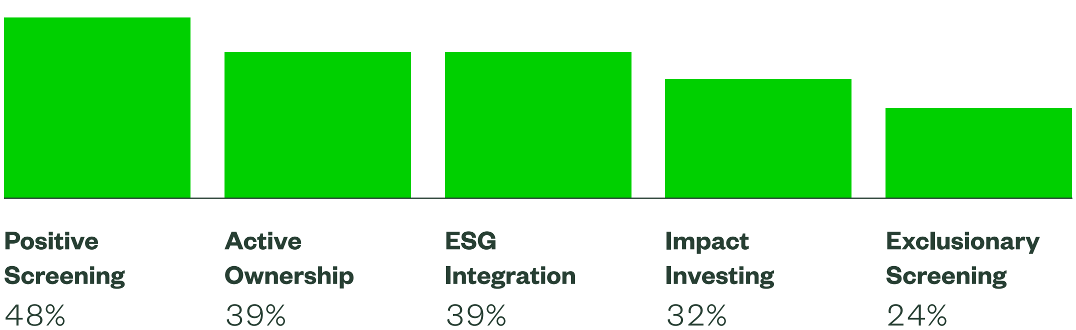
North America



Europe



APAC



Measuring Impact & Outcomes

Investors are Having More Success Measuring ‘G’ than ‘E’ or ‘S’

Governance has been relatively easier to track, with 26% of respondents saying they’ve achieved strong measurement of these outcomes. Environmental and social data have been difficult to track and measure reliably. As the right ESG data becomes more available solving this issue will become easier.

Index Investors are Better Able to Measure the Investment Impact of ESG Factors

Nearly three-fifths (58%) of index investors say they’ve managed to measure the impact of ESG factors on investment performance versus only 7% of active investors. With index-based strategies, it is easier to isolate the effects of specific ESG factors, perhaps making index investors more confident in their ability to attribute performance to different factors.

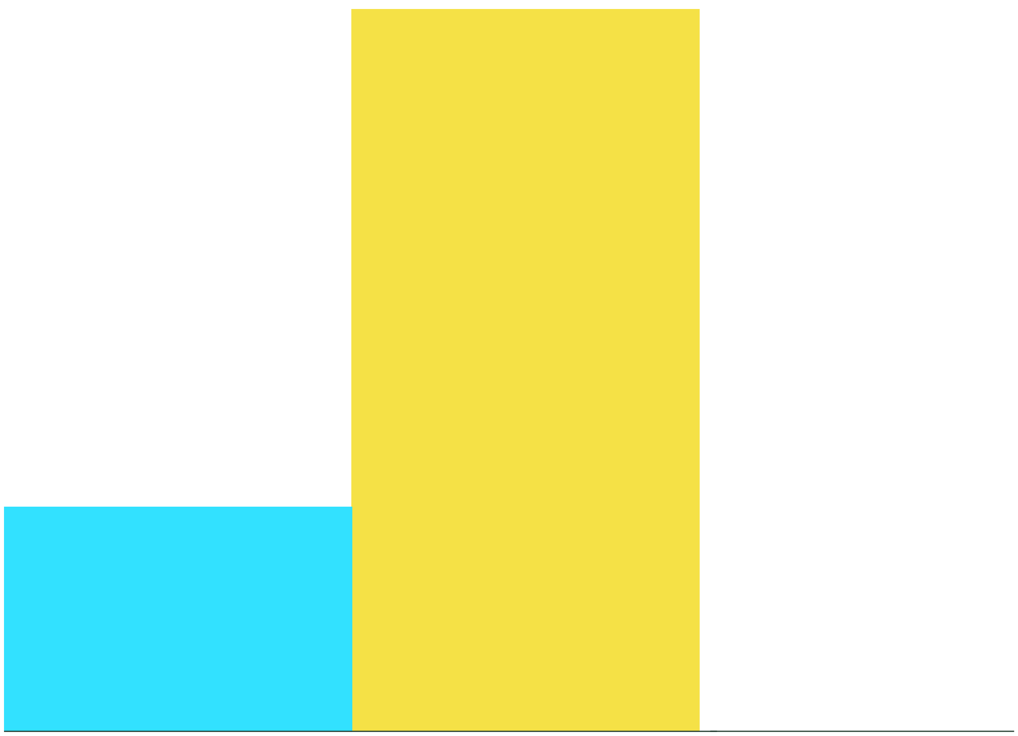
Nearly Half of Investors Feel their ESG Strategies have Impacted Company Behavior and Reduced Portfolio Risk

Nearly half of respondents think they’re already seeing a positive impact on the ESG performance of companies they invest in and in reducing portfolio risk. Only 9% say their ESG adoption has delivered a tangible impact on generating outperformance to date, though for those respondents for whom mitigating ESG risk is the biggest driver of strategy, 24% have observed a positive impact.

Index Investors are Better Able to Measure the Investment Impact of ESG Factors

Perhaps unsurprisingly, far more index investors than active investors felt that they were able to clearly measure ESG investment impact. Overall, 35% of our sample felt they could reasonably calculate the specific impact.

How effectively can your institution calculate the specific impact of ESG factors on investment performance? (Percentage replying 'Somewhat' or 'Highly Effectively'.)



Predominantly Active ESG Strategies
7%

Indexed Equities and Fixed Income ESG
58%

“ On the active management side, it’s extraordinarily difficult to attribute performance – good or bad – to ESG factors alone. I don't think anybody has done it fully convincingly.

There are so many different factors that impact performance across a portfolio that it’s difficult to isolate any one.

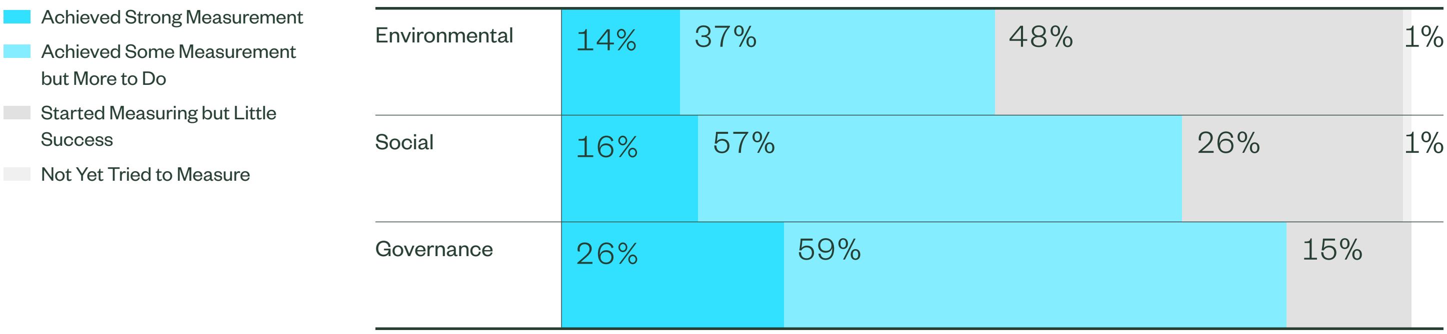
Passive has an enormous advantage in attribution of being better able to isolate different factors.

— Michael Cappucci, Harvard Management Company

Investors are Having more Success Measuring Governance Outcomes than Environmental or Social

Governance issues, with a longer track record of company disclosures, have been relatively easier to track — though still challenging. Environmental and social issues remain very difficult to track and measure reliably. As ESG data provision evolves, solving this issue will become easier.

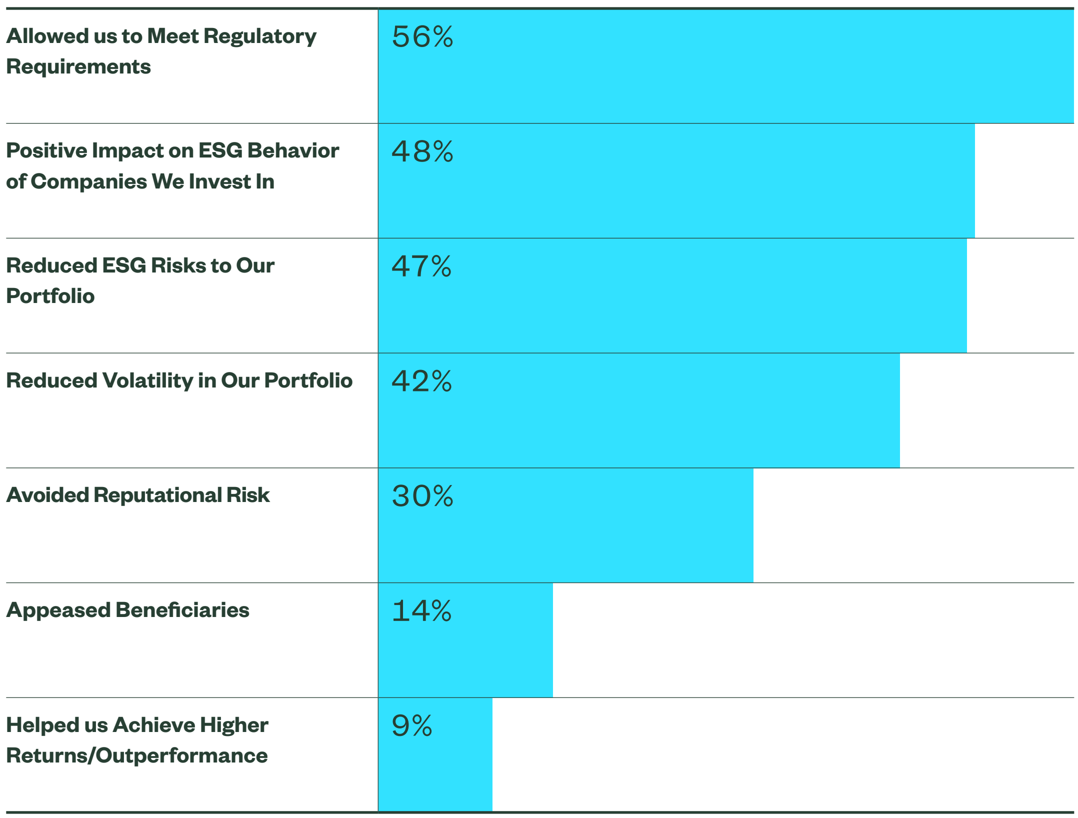
Has your institution achieved any tangible measurement of the positive impact its ESG strategy has had in the following areas?



Almost Half of Investors Feel their ESG Strategies have Impacted Company Behavior and Reduced ESG Risk in their Portfolio

ESG impact is seen to be wide-ranging. Half of investors reported that ESG investing variously helped them meet regulatory requirements, positively impact invested companies, and reduced risk or volatility.

Has your institution's ESG/responsible investing strategy achieved any tangible positive outcomes to date?



Digging Deeper

For those being pushed towards ESG investing by a desire to mitigate ESG risk, 24% say that their strategies have helped deliver higher returns.

Of respondents using positive screening and active ownership, three-fifths believe that they've had a positive impact on companies' ESG behavior, but only 39% of those using systematic integration say the same.

Finally, 57% of the active investors say they've reduced volatility through their ESG strategies versus only 28% of index investors.

Endnotes

1 See "A Blueprint for Integrating ESG Into Equity Portfolios," by Bender, Bridges, et al.

Towards the Future

Our survey illuminates regional and institutional divergence on approaches to ESG investing. And yet some things are clear no matter the region or investor type:

- **Investors are increasingly seeing ESG as part of their fiduciary duty, removing a previous barrier to adoption.**
- **Regulation is driving investors towards ESG. Though the regulatory landscape is complex and often requires expert guidance, investors *will* need to engage with ESG.**
- **ESG investment resources are sorely needed but not yet there for many institutions.**
- **Investors need the right data to make the right ESG decisions and yet the current state of ESG data — single sourced, low correlation, confusing terminology — is a substantial hindering factor to adoption.**
- **A growing awareness of the true potential impact of ESG is making the ability to measure ESG risk a key attribute of any investment manager.**

Despite the mix of drivers pushing and pulling investors to or from ESG investing, it has clearly reached a tipping point where institutional investors cannot afford to ignore it — either for the risk that it may pose or, perhaps even more compellingly, the opportunities it presents.

How We Can Help

As our survey shows regulatory, stakeholder and other environmental drivers are increasingly making the need to find the right ESG investments solutions an urgent one. But we also know that performance is key to the right ESG solution, so we've developed the tools and solutions to help you meet your ESG and performance goals.

Proud signatories of the UNPRI, rated A+ for our firmwide strategy and governance of ESG investments and a leader in ESG investing for 30+ years, today we are integrating ESG directly into our investment processes. We have a full suite of ESG products to help meet your objectives.

Please visit ssga.com/esg or contact your relationship manager to discover how we can help you get your ESG strategy right.

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Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 27 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's third-largest asset manager with US $2.9 trillion* under our care.

* AUM reflects approximately $36 billion (as of June 30, 2019), with respect to which State Street Global Advisors Funds Distributors, LLC (SSGA FD) serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated

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